DOE MEETING

AT THE PLANTATION

Tuesday, May 27, 1997

6:45 P.M.

MR. STEGNER: I would like to welcome you to the meeting of the Department of Energy at Fernald. Tonight we will be talking to you about soil primarily, a soil and water project workshop. What you guys are thinking in terms of the OU2's and OU5 and we will be talking about the soil certification process tonight and has been our custom lately to have a court reporter that will be recording this and putting it into a form and it would be ready within approximately two weeks so if there is something that you want to talk about in more detail, check the PEIC.

UNIDENTIFIED LADY: If I could say something Gary, when everybody talks at once, it is very difficult for her to get the transcription right so if you want to speak, if you could state your name and use the microphone and speak slowly and clearly, we will have a really good record to look back on later, right?

MR. STEGNER: Well said. We'll go until about 9:00 tonight. We won't be stopping in the middle of a critical topic, but about 9:00 is our normal time to stop but it is also our normal practice that the presenters and the DOE, Fluor Daniel Fernald and I'm sure the regulators will stick around and discuss any particulars that you guys might have.

What we would like to do is have questions after each presentation, however, if something comes to your mind during the course of the presentation, we will feel free to hear that also. I don't think I forgot anything. We've been going straight through without a break and that has sort of been working and let's try to keep that and do that. Our first presenter tonight will be Rod Jenke from DOE OU5 man.

MR. JENKE: All right, everybody hear me okay? I think the volume seems to be working. I'm going to kick off the soil discussion. Arlan Hunt is going to follow me up with more detail and specifics on what is going on right now but too I guess, kick off the bigger picture of soils and remediation at the FEMP, these piece slides that I have is going to hopefully provide an introduction to that and I guess if you have any questions, Arlan and I will take them at the end of the first component of the evening when which is the soil discussion. I guess with that in mind I will be talking about the soil characterization and excavation project specifically, which is at the FEMP, represents one group and Fluor Daniel Fernald and then basically myself and a few others within DOE. The project itself in terms of soils primarily can be broken out or I guess described by those soils that

are part of the operable unit at the FEMP. Recalling there is five operable units so we are only dealing with soil beneath those operable units. With operable unit 5 being the soil or remedia operable unit, soil and the ground waters so the majority of the soils are in operable unit 5.

In terms of the lay of the land, we are looking at essentially these area. I might be able to improve this a little bit. We are dealing with a total of 7 areas that will be remediated and these 7 areas are sequenced according to the accelerated remediation plan that we are implementing now. Area -- I forgot my pointer, but area 1, phase 1 is what we are working on right now at the northeastern portion of the site. If you drive up the north access road, you will see quite a bit of excavation work out there. The work down here in the, what is often referred to as the southern waste unit or south field area represents area 2 and that has been broken into a couple of areas. Those are, would represent the scope, the primary scope, the principal scope of operable unit 2, which would be the southern waste unit. Operable unit 3, the production area, would be area 3, 4, part of 6 and 5 and those are dealing with the soils from the low grade feature of the building

in terms of the soil excavation and characterization project. Operable unite 4 would deal only with the soils that are left over after the silos are completed and that would be in area 7 and then 6, the rest of 6 would be the waste pits after those source materials are removed. The soil excavation and characterization project over all remediation strategy is made up of essentially these components and this is really, I guess, a jargon or language that has been developed through the process carried over from a certain degree from the RI/FS process at the operable unit went through, but also it is designed to I guess embody the issue with soil characterization and excavation we have to deal with. We are really dealing with a couple of issues. One is the clean up level that were established in the various record of decisions primarily operable unit 5 record of decision. Those would be the FRLs which is the final remediation level for various contaminants and the long list of those contaminants or CEC's in the various documents represents I think 80 some constituents or contaminants; the primary being uranium and a few other radioactive species like thorium and radium. Those would probably be the principal contaminant across the site. Clearly uranium being the driver,

but then in certain areas there may be lead concern or maybe organic concern, there may be, in the production area, may be pesticides, certain pesticides are on the list for certain areas. It depends on where you are at but essentially what we are looking at is a process that will characterize the soil and determine what is there and then excavate or remove that soil to meet those clean up levels. That is the overwhelming, that's the driver of the process.

Another driver to it in addition to achieving those clean up levels is what we call the WAC and those are the waste acceptance criteria and I think a number of you if not all are familiar with that from the standpoint of what is allowed into the onsite disposal facility and I think there is a later discussion on, I believe Jay and Mike Hickey will do talking about that a little bit. That is a driver on soil characterization and excavation because there are certain contaminants like uranium that we have a WAC for that that you cannot see on the onsite disposal. If you pick up soil that has greater than that and that is 1,030, I believe, if you pick up soil that is greater than that in concentration then the uranium, it has to be segregated. The idea being you want to identify these WACs excedent areas in place before you

remove it so that becomes a driver or a priority for the soil characterization and excavation project. Those being the two major drivers, FRLs and WACs are first scoped out in a pre-designed investigation, first polar there and that activity is kicked off by looking at the remedial investigation or RI data which is generated through each of the operable units and necessitating what your contaminants are for a given area. For instance, you know, like the production area. Looking at the RI for operable unit 3 combined with the RI from operable unit 5, looking at what your contaminants of concern were and then breaking that down or zeroing it down on the individual areas with that production area where you had hits as they are called or indication that a particular contaminant exceeded the final remediation level. A lot of that initial step of that would be initiated in the pre-designed investigation. Remedial design than would get into I guess taking that a step farther and developing the documentation such that not only looking at the contaminants that are a concern in that area but also looking at the process by which you are going to remove that contaminated soil or debris. What type of engineering feature do you need in place in the way of setting basin, setting trap, diversion,

dikes or ditches, storing areas, lay down areas, those would encompass the remedial design activities for soils, characterization excavation.

These bullets are not the activities, they are not totally done in this sequence. In terms of remedial action would be the activity of using that remedial design information documentation which has been generated and then implemented, excavating the soil, debris, to the standards or practices or lay outs and the remedial design documentation. Precertification scan is something that we would do or will do or are doing in the process of assessing how close we are to the clean up level or FRLs before we go out and actually sample forms so it is a step to ensure it gives us confidence that we have excavated enough. The reason I say it's perhaps a little out of order but probably best not to think of this in terms of exact sequence in areas but during the remedial design steps, actually we would try to do some precertification or I guess characterization scans then with the real time instrumentation that we are going to talk about in just a second to get a better handle or understanding of what is out there. After we are confident that we have achieved the FRLs to a precertification stand or analysis that the RI data

combined with the new data that has been generated through a remedial design phase, we would then embark on what is called certification. Certification is just a systematic process which you lay out grids and take samples and when I am talking about a grid, I am referring to an area that you would break the particular area of the site up into in order to determine that you had met statistically met your clean up level. For instance, and in area 1, phase 1 that Arlan will speak to you about, that was broken up into certification units and then for each certification unit examples are taken and analyzed, the results analyzed to determine whether it passed or failed and again, we will talk about that in a little more detail. Once we have completed certification, then we go into grading and restoration, seeding and we don't want to do that until after you are assured that you are certified and then you mix up the soil. You have to go back in and excavate more. You would not really know how far to excavate. You have already tilled the soil. A lot of contaminants that you are looking at, depending on where you are at at the site, is deposited by aerial deposition, an area along the phase 1 so the contaminants primarily reside at the surface so you want to take them off the surface and

determine if you have met your clean up level.

In terms of the scan, the real time measurement, we basically have two instruments currently right now that we are in the process of testing and hope to I guess purchase or develop or acquire additional instruments as we get farther into the characterization excavation process that were built on these two instruments and that would be what is called the high purity germanium detector and what is called the RTRAK. Johnny had spoken about both of these at our previous RI/FS meeting I think that was back in April, wasn't it. A picture of the RTRAK is right here and it's a John Deere tractor with a detector mounted off the back with a wire that feeds up into the compartment behind the cab that houses a computer and what is called a multi-channel analyzer that deciphers the signal into, understandable or discrete energy level so you can determine what the isotopes are that you are scanning the ground as it moves across or moves around the side. On top is called a GPS, global position satellite system so you can accurately track your whereabouts on the site and download that information to maps to show concentration profiles for a particular area. The high purity germanium system is essentially, as we

have it right now, is a tri-pod mounted unit with a detector right here (indicating) and computer lap top PC that basically interprets the information similar to what is in the RTRAK counsel. These instruments, the sodium iodine and HPG are different types of detectors that afford different disadvantages or advantages, depending on how you want to look at it for analyzing or scanning the radioactivity in the ground.

Let's talk a little bit of the remedial design process which hopefully we'll set up what is also going to be talked about. This, as it is laid out right now, this is something that we are working through, completing area phase 1. Right now we have one remedial design document submitted to EPA for each area and that is what we call the integrated remedial design package, the IRDP. In that it contains the drawings, specifications, excavation plan, certification plan, detailed on CEC selection and what not. That was submitted for aerial 1 phase 1 and we proceeded according to that plan.

The next area that we're going to be getting into is area 2, phase 1. I will give you a map here again, that would southern waste units down in this area (indicating). The active/inactive fly ash files

in the south field area and we are working through the package, I guess, getting to develop the IRDP for that area right now. In concern, we are working with the EPA and also hopefully kicking off what is called a site preparation package for that area allowing us to get in and learn a little bit about the area and at the same time set up for the excavation plans that will follow, which is, in this area is going to be fairly elaborate compared to area 1, phase 1 because we are not dealing with just surface areas. We have considerable amount of material to remove that will have to be characterized as we go along with respect to WAC issues. The overall schedule area 2, phase 1 which is like I said, this area down here (indicating) and area 1, phase 2 which will be moving south from area 1, phase 1, will be the next area that we will get into representing the area, I guess the next portion of the OSDF footprint in a parallel with area 2, phase 1, we will be working that area as well and that also includes the old incinerator and sewerage treatment plan.

The overall schedule for this area is laid out here (indicating). Area 2 is broken into an A & B because it is a fairly, or area 1, phase 2 is broken into a couple of parts because that is a bigger unit.

You have an incinerator and sewerage treatment plant and you also have a southern unit to that, which used to be the grazing area and those contaminations is not expected down in this area. That is an area that we will certify following it up with areas 2, 3, 4, 5 and 6 and 7, rounding out the accelerated plant. The later areas certainly production are dependent on removing those, knocking the buildings down and going in and getting the soils and there is obvious, there is funding assumptions and access assumptions that are scheduled.

That's pretty much all I have for this part, I guess, the global perspective on it and I guess if there is any questions, I think we will take them at the end.

MR. HUNT: Okay, Rob gave you a big picture of soil remediation and what I am going to do is expand a little more specifically on area 1, phase 1 up here in the northeast corner of the site as Rob pointed out. This is really the first area for our remediation activities. We are really looking at 121 acres in this area and part of that is wooded, the pine forest. Part of that was an old pasture field previously and we wanted to demonstrate that the contaminant are less in the FRLs that Rob had

discussed. The excavated soil had been stock piled and we did collect soil and some of the debris. The debris is mostly concrete, wooden stumps and other solid material. The goal is really to certify this area as clean or as least that the contaminants are below the FRLs establish and then we want to control access to make sure that it does not become recontaminated. As a result, a portion of the area had been excavated and not all of it was. It does include the northern portion or the northern portion of the footprint of the OS and we do have separate stock piles for the soil and debris. The soils are excavated on the east side of the road or stock piled on the east side and likewise the soil on the left side so we did not have cross contamination issues. This was what the area looked like last summer, looking down the north access road from the bottom of a photograph all the way up the top of the photograph with the plant on the right side. The brown area here was a test pad, that was testing soil compaction and performance of the soil in that area for the OSDF. That all occurred last summer. We changed the landscape quite a bit. One of the first things we did was to establish erosion control. We wanted to prevent sediments after we excavated the area, we had a lot of

loose dirt and we wanted to prevent that from washing away from the area. Here we were excavating a sedimentation basin to collect all of the sediments that would be washed into the low lying areas. This photograph shows that sedimentation after it was completed. We excavated the central part, built a berm around it and a storm water would collect and all of the sediments would collect in that area and be contained.

Later in the fall of last year, this is what the area looked like. I believe this is in November. Again, the north access road going south from the bottom of the photograph toward the top. You can see all of the brown area the sedimentation basin that I showed you previously is located right here (indicating) and it has collected a lot of water and all these white areas are accumulations of water from the large amount of rain that occurred in that period. We have about 45 acres that have been excavated in this area. The sed basin in a southern end, in a smaller sed track and two more here in this area to collect the water because we did have a down grade water flow in that direction and from this point down graded toward the north.

The, I hope you can see this, the green area

shows the extent of excavation and again the north access road running down through here (indicating). All of the green was excavated on the east side of the road and then there was a smaller portion on the west side of the road that was excavated the soil stock piled on the left side here and the east side here and smaller area for the debris stock piled on both the east and west side of the road. The area not excavated is over here bounded by the red line and that is mostly hardwood and pine trees.

Now, what are we looking at for the different areas of the site. Previous information shows that there are certain contaminants that are principally of concern. Rob has talked about the contamination of concern for this area, the principal one being the uranium, thorium, three isotopes of thorium and two different isotopes of radium and I will come back and talk about the radium isotope in particular and we had the organics in metals and the organic arsenic and beryllium and these are the contaminants that we had analyzed for and our certification process is showing really here, we certified the area by collecting physical samples of the soil. We performed laboratory analysis for those contaminants of concern shown on a previous slide and validated that data and it was

legitimate. Entered that into our system and performed statistical analysis of the data to determine whether it had been remediated to the appropriate level. We had completed all of our data collection activities analysis and I will show you some results.

We divided up the area into 44 radiological certification units, 30 inorganic or metal certification units and 7 PCBs for a total of 81. This is a map of the area and the green areas with the rectangle, squares and large boxes and small boxes, these are the certification metals or inorganic certification units. The larger units represent areas based upon previous data assessments of lower contamination and the middle size being more moderate contaminations and this is not very clear but the smaller certifications units here being those areas likely having higher levels of contaminants. In each one of these we collected a minimum of 9 certification samples for metal and we previously had maps in which these areas were all white and as we went through the process and completed certification and statistical analysis and determined that the past we color as green so all of the metals have been colored in as green. We had one certification unit, this one right here (indicating), this little long rectangular one

there, the west side of the north access road that had failed our initial certification analysis and we remedied that or at least we were supposed to today by going in and excavating another six inches of soil off of that certification unit, but the rain over the weekend has delayed that. We expect to do that excavation tomorrow and Thursday.

Now, we have a different map with different certification units with the radiological contaminants, the radium and thorium. The general same principal followed the larger certification unit of larger contamination and a smaller are likely to have higher levels of contamination. We collected a minimum of 12 samples in each one of these identified certification units and likewise all of the green areas, the data shows that we do need the certification requirements and therefore pass and the yellow areas are areas where the initial data shows that we did not need the certification requirement and corrected action is required. The expected solution is to go in and excavate another level of soil in six inch or twelve inch lips as may be necessary and we have radium 226 in this area (indicating) and radium 228 as well as a hot spot of uranium in 020 which is up at the northern part of the area.

Now, talking about the corrective action, the first one is the arsenic P17-32. We have collected certification samples which show that once we excavate the six inch level of contaminants that this one will meet the certification requirements and therefore pass. We are still working on the radium 226 in this particular CU and the radium 228 in this CU. We have collected samples at depth in both of these areas. Actually here we are collecting some additional samples to add to the data base that we already have. We are very close to the FRL here and I think by collecting these original samples that will show that the area in general, the average contamination is less than the FRL. This one we split into two pieces because a southern half had levels of contamination higher than the northern half and we are resampling both of those and attempting to certify them as two unit certifications so we have 81 certification units total in the area and it looks like we have two of these, two here because it was divided and one here that we are still working on in our corrective action mode.

We are nearing the completion of our certification process. We are on target to submit a report to the EPA on the first of July which will

summarize all of the data or the process, the certification process, all of the data that we collected as well as the corrective action that we had to institute to fully remediate the area. We have gained a lot of lessons learned, experience in this process and we expect to apply that in our future area so that we can be more effective and efficient in the process. Now, as we remediate these areas and turn it over to the final land use, we are looking at the final grading and restoration activities so that as we remediate the areas throughout the site that we can conduct restoration activities in conjunction with excavation activity so that we won't end up with a moonscape, that we will be able to restore wetlands, prairie lands, woodlands, create green space as we go through before the remediation.

The guidance for our restoration activities are specified in the natural restoration plan which will be issued very shortly and this plan has been developed under the direction of the natural sources trustees which are comprised of U.S. Department of Energy, the Department of Energy and the EPA. To give you an idea of a concept of final restoration, the dark rectangle will be the onsite disposal facility and the other area on the center of the site we would

envision woodlands, some ponds or lake up to the north, enhance the pine forest, wetlands and hardwood area, the area over here (indicating), Paddy's Run, we can see that converging into dry area, trees and bushes, suitable for bird life and more wooden area to support commission of undeveloped park.

Our schedule of activity I talked about July 1 as a very important date for the certification report and site of our excavation plan would be issued in July likewise and the IRDPs that Rob talked about, the 7 waste units in October of this year for area 1, phase 2 in November and then the excavation and site prep excavation for area 2, phase 1 for the southern waste unit would be in 97 and 98. So, that is kind of a quick summary of the activities, the key activity in area 1, phase 1 and I think Rob and I would be open for questions at this time.

MS. CRAWFORD: Can you put the map back up there, the one with the yellow square on it?

MR. HUNT: That was the map and certification unit for the primary radiology?

MS. CRAWFORD: I had 020 and U18, P1732, it had a yellow block on it and green.

MR. HUNT: Is this it?

MS. CRAWFORD: Yeah, I am assuming the one

on the sides are from the old incinerator, the sewerage treatment plant and all that, correct?

MR. HUNT: That's a difficult question and we are not sure of that. We are trying to ascertain the source of that Lisa.

MS. CRAWFORD: Well, back on the top, why are we -- I know we found a hot spot there.

MR. JENKE: We think that that is an analytical problem with radium 0228 in that and I guess one of the things that concern, the point being is 020, we did have what we call a hot spot for uranium out there, 200 parts per million. Hot spots elevated levels of uranium, whatever you want to call it, that area I believe Johnny discussed it at our RI/FS meeting was removed. What this is dealing with is radium 228, which I said was an analytical problem. We are in the process, I believe of discussion on this very issue, having the analysis taken an additional samples and having the analysis, having those samples run and then taking the results that are denied and doing a statistical analysis on that. The reason we believe it is an analytical problem is the fact that radium 228 is a daughter of thorium 232. If you look at the analytical results for that CU for the thorium 232, we pass. Now, the problem gets into the

analytical method that you use and I will say the uncertainties are the errors in those methods for radium 228. Radium 228, this gets very technical. Perhaps if you'll just bear with me on a minute and then perhaps I can answer any questions or anything but it is primarily is a bate _____. It decays by emitting bate particles. From the bata particles, there are also gammas that are given off but from its daughter so when you take a soil sample and send it to the lab, the only way to analyze that sample for radium 228 is called gammas trestroscopy which is similar, is the same actually as a high purity geranium analyzed for. The gamma from 228 that comes off with the bata is too weak and comes to infrequently by percentage basis to analyze so you have to analyze the short life daughter and there is a number of those but their spectra or radiation are rather complex and what this all boils down to is depending on what lab or analytic method is used for radium 228, you can get different results and given the statistical tests that we are using for radium 228 and that uncertainty in the method, it is not very hard to have it fail and so we are reanalyzing that and we don't believe that is a radium 228 contamination product and I guess part of the reason

we don't believe that is it is (1) it should be at the same concentration with thorium 232. That is what is meant by secular equilibrium and that reason for that is the half life for thorium 232 is quite long but for radium 228 it is rather short in comparison. It is 5.40 years I think and the time in which we did processing of thorium when radium could have been separated from that dates back to maybe 72. Nothing has been done since then so in those 25 years the best thing that we could do is come to an equal concentration with thorium. It should not be more than what is showing there and this is an analytical problem that we need to work through. What we are attempting to do is, and we have just submitted a letter to the EPA, U.S. of Ohio is to reevaluate how we are looking at the RFLs, these clean up levels for some of the radium nuclei. For two of the radium nuclei that are on that list for area 1, phase 1, the radium 228 and thorium 228, we are proposing that we report thorium 232 numbers and not report those because they should be in secular equilibrium with thorium 232 but we are going to get into analytical problems as we march through this process by analyzing those things and recording and this is a package that they are in the process of reviewing and we need to

work through and perhaps if you want to based on your feedback, talk about this at a later meeting. The radium 226 issue on the eastern end of the site, really at the site boundary is a separate issue why we failed for a radium 226 there, nobody really knows. It is quite some distance from the incinerator. I don't know that it is because of that. We did have radium 226 in the incinerator back when the removal actually was done but why we have it there is hard to say.

MR. HUNT: All of these other ones are clean contamination in this area.

MR JENKE: When we say contamination we are talking about something slightly above the FRL for radium 226 and the FRL for radium 226 is 1.7 pecocuries per gram. Background is around 1.5 for background so we are just a slight increment, essentially .2 pecocuries per gram background unit. When you get into the analytical problems, you get into statistical problems. We will fail these statistics tests in a given CU even if the mean is below or we can fail, even if the mean is below the FRL. In other words, you take the 9 samples, one of the twelve or whatever we have and average those out and come up with the mean. I'm not sure about this

radium 226 issue but in others, you can fail it based on the mean being below but the statistical test on confidence says there is enough variability that you cannot be 95% sure that you pass so it fails. It's a complicated process but it's a statistical process nevertheless. It allows us to be sure we have passed. We struggle with explaining this to ourselves, Dennis or Tom or anybody, anything else?

MS. CRAWFORD: So what is the bottom line?

MR. JENKE: The bottom line is we are going re-excavate those area. The radium 226 area. 020 we're going to have re-analyzed and then when we get the data back, we're going to go forward. The position that we presented to Ohio is that both of these areas are outside of the OSDF footprints and we are just going to march through very slowly and get all of the issues resolved and move on and not say it's certified until everybody is happy with the results. This is a learning process and we go through this and I suspect for radium 226 and thorium 232 we are going to run into these problems because thorium 232 is even out far out is closer to the back than radium 226 is. It is stuff, we don't really know what the background is for the site. Our background study was offsite, so it's a difficult issue.

MR. JEWITT: You see more of these things go up over time, you're going to learn we are cleaning this site up for radium 226 and thorium 232 and those are going to be the driver only in a few specific areas. Are you going to be talking about uranium in the clean up and that will be south field area where you are right on top of the production -- (inaudible) you will be looking at those isotopes that are closer to the background, thorium and radium and when you are dealing with so closely as background these statistics will be used to evaluate those units, if we are cleaning this up, 95% confidence level, 5 out of every 100 are going to fail, even if they were cleaned. That is just the way the statistics work out. (inaudible). At least on, based on these statistics, you should have failed because the statistics and that is probably just about what statistics will tell you that you are going to have at least one of them that will fail regardless of what the data was so I think, you know, a missing part in my opinion, we had something come out and clean and we are worried about how close we're going to be to the background in these clean up numbers which are so close to those backgrounds. I mean, what this did prove is that you can clean up these, this and only two of them actually

fail. One of them is probably just statistical and not necessarily contamination.

MS. CRAWFORD: I would think you would have found the one up there, you would have found it somewhere else. That's what sparked the question.

MR. JEWITT: None of us understand why the hot spot is there. Other than something, I don't know what happened up at the northern part up there during the construction phase when we were using that road, no way to explain it other than it was there and we dug it out. The radium 228, like Rob said, we don't think it is real, it's not really there and we think there is sufficient evidence in the other analysis that was done, it very much leads us to question and then our pathforward, before we do something stupid like run out there and dig out three acres of trees that have been there fifty years or whatever, we will make absolutely certain we are digging it up for the right reason.

MS. DUNN: Are we still talking about 80 parts per million?

MR. HUNT: The rates are of different clean up levels. On site, total uranium is 80 parts. We have a large goal that we have set for ourselves at 50 feet, that means, during the RFS process we try to

look at -- Rob talked about real time instrumentation, the RTRAK. The contaminant we are dealing with have a gamma associated with it. The vast majority are very weak gammas but we wanted to take full advantage of that gamma, meaning that that contaminant is in the environment and we wanted to take advantage. It would be foolish of us not to when the contaminant is skipping off the fingerprint for us to not take advantage of that and not seek it out. We know there is instrumentation that has been used to cross the country for similar contaminants and have been able to succeed down for a threshold of about 50 part with a hand held instrument. During that excavation process you can use that instrument to guide you around threshold or around 50 PEMs so to have it on a cost effective mechanism to try and reduce down during the -- during the RI/FS process, how much dirt would that be if you went down from 80 to 50, how much dirt would it take? We found it was less than 5% actually like 2-1/2% additional soil to go down 80 down to 50 but we had a real time instrument to be able to do that. The bottom line, the site we adopted around 50 PPM and in area 1, phase 1, the cell footprint area there was no pre-existing before we did. It exceeded 50 PPM. What was, as Tom said, we were chasing the radium 226 and

thorium 232 even though it was that small an increment on the background and above our FRL and that made us go out and chase after it and that's what we did.

MS. DUNN: That that will still cover, we have talked about this I know in the past but because I was always discussing it in terms of uranium, if we clean up the uranium, we would catch everything else, but now you are saying it's basically --

MS. JANKE: Well, there are two different things. One of them is the uranium and the uranium footprints which is the uranium contamination of the site and what we have found with minor exception is that if you dug within that uranium footprint, the clean up level, you would have to incorporate or engulf the entire other contamination plant and one of the areas that we knew violated that general rule was the area that we went up to and when you move into the production area to chase uranium, we think you will get the rest of them, that remains to be seen. Radium 226 and thorium 232, their clean up level is so low it will be difficult, there's no question about it.

MS. DUNN: But, it will still be protected.

MR. JANKE: It is really not a protection of the operable unit. It's not mobile. Neither is radium 236.

TOM _____: We actually thought clean up, actually the uranium is in the range of less than 20 but really in the range of 10-15.

MR. JANKE: 10-13.

TOM _____: The other ones are -- the radium 228 failure, we had a clean up level 1.8 pecocuries per gram. We failed at 1.83. We are talking, we have tests and we failed and now we go to figure out what we're going to do and then the radium 226, we failed by 600th for that one so we are troubling with a 100th place, you've got to remember the analytical uncertainty on this on is about 10% at least.

MS. DUNN: Just threw me on that one statement, no single sample exceeds the two times the FRF, two times 80 or two times 50, I mean, if you have them coming that low, you've actually got them coming in --

TOM _____: Two times gets into some of them like radium 226, two times, you know, the actual clean up level is used across the country and the radium 226 is actually 5. Our clean up is 1.7 two times is still going to be half of the clean up level used for the rest of the country. We chose a lower clean up level because of more contaminants being

processed. That drove us to a lower clean up level so the two times is really for those things that are right up in the background, the thorium series and the radium series.

MS. DUNN: I have one other quick question on the real time measurement from those two things, they actually process the information right there on the spot?

MR. JANKE: The RTRAK system generates about 1500 bata points per I think it is per acre, maybe, that is right 1500 per acres. That's a lot of data so the difficult thing with that is deciphering or graphically displaying that data and evaluating after you graphically display it and that is coming along, that process. So, although the data is generated right away, it still has to be manipulated and we're getting faster --

MR. HUNT: This will take us a while, to tell you the truth. It is a mute instrument, the faster, the longer count, the better the resolution. We are getting the real time information and then trying to collect and manage that data. That's the part we are not good at.

MS. DUNN: So, what would be the availability of the results?

MR. JANKE: That's a good question. That's a really good question. We've done, what we've done with the RTRAK data is having done, it's being posted on a web site for us internally at work and we can give you the address of it.

MS. DUNN: I cannot get to the internet. I tried to load AOL on and there's not enough memory, I only have 4 MPs or whatever.

MR. JANKE: Other than that, we can do these meetings, these round tables or certainly --

MR. HUNT: We can go to a print out on the web site and issue a study on July 14 which lays out all of the real time data that we collect in the footprint area that will be compiled in the one report which speaks of the usefulness of these incidents for future clean up on the site. That's one of the intents of the report on July 14 and we can certainly get you that report and in lieu of that give you a print out of the web site. It's laid out pretty well, nice plot and everything else.

MS. DUNN: You just gave me one other, and this is my last question. All these different reports that you're talking about, some of these apply to the environment monitoring subcommittee, the factors and some of them apply to the natural resources

subcommittee. Will we automatically get these reports when they become available or is this another one of those things --

MR. JANKE: Our discussion up in the executive conference last week was Mark _____ was going to provide a crosswalk from the IMP to which these reports --

MS. DUNN: I am talking --

MR. JANKE: Again, this should be one of them that he will write a crosswalk to.

MR. HUNT: I don't know what the policy is, if you want it, you can get it.

MS. DUNN: I have been told we don't ask, we don't get it.

MR. HUNT: Some of these things are bulky documents and probably 1000 pages.

MR. JANKE: I guess the question that I have for you is do you want to look at strategies and plans that lay out in the process or do you want to see the certification results? If you just want to see the results, those are smaller documents and we can either give you a document for like area 1, phase 1 when that goes into July 1 or we can give you printouts of that web site because it will be there as well to go through the process. That will make it a lot simpler.

MS. DUNN: The results are basically what I want to see, but the other, if you need to walk, I knew we ran out of time last week but we really need to start having regular meetings if there is this much stuff out there.

MR. _____: Now is the time period to get involved. This area, the thing we called the cycle excavation plan which is our strategy, how we're going to walk through this.

MS. DUNN: You can walk through that -- (inaudible).

MR. STEGNER: Okay, we need to move on. Next is Jay, are you pitch hitting for Rod tonight?

MR. HICKEY: Can everyone hear me? I guess everyone knows why we are here and what we are discussing to go through this. I am trying to go through and talk about here. Now I understand your dilemma. It's the onsite disposal facility, give an overview of what the scope is and what our construction schedule is with documents that we are producing this year and how we're going to start marching and I like to see physical progress of the site.

Those of you who remember this slide or have seen this slide at the quarterly meeting but just to

walk you through where we are, this is the first phase of the onsite disposal facility starting in the northeast corner and we're going to relocate the north entrance road and the first phase of that will come down along there and we are building the pole road which is from the southern waste units down here all the way up along this red dotted line to roughly there (indicating) and that is to transport the waste starting next March into the onsite disposal facility. Other things that we want to talk about tonight is a north entrance road, the relocation of that, the weight acceptance criteria plant, our ground water monitoring plan that has been renamed the onsite disposal facility ground water and leak detection monitoring plan and it is a more encompassing document the first time I mentioned that to you.

The project scope here is the construction of the onsite disposal facility as I have talked about before, which is the first phase would be cell 1 and some preliminary excavation for cell 2 so we can get a little bit ahead of schedule and a quicker jump on the construction sequence for next year. We've got the leachate conveyance system which is the system which collects leachate that comes down through the cell, through the layers and goes to our pump station

and that is pumped over to be treated by the advance waste water treatment facility prior to discharge. Then, we've got two roads, on the haul road which was mentioned plus the re-routed north entrance road.

Construction schedules that we have for the year, we started the leachate conveyance system back in January. There was a number of submittals that have to go through there and it has taken some time and progress to get the contractor up to speed and working and we are currently installing a number of those lines across the site right now. Our haul road started the end of February with clearing and grubbing down on the southern part of the site. We have moved through there and we have run into a few problems. A lot of material have been placed out there over the years like twigs and branches and just not the right material to try and build a road on so we have been help up trying to excavate that extra material so to get a good solid foundation there. The north entrance road is scheduled to start after Arlan's all of the data is for the certification report and that is a July 1 start date. It is also the start date for the construction of the onsite disposal facility, the first phase.

The north entrance road, the relocation at the

site we're going to, we'll have to shut down the north entrance road for a portion of time as we go through and relocate it. The reason we have to go through this is the north entrance road is currently in the footprint of the onsite disposal facility and therefore we have to move it further east and will relocate it into two phases. As I mentioned the first phase starts July 1 with a completion date set October 31. Phase 2 which will take us all the way down through and around the entire disposal facility is scheduled the year 2001 and we are doing this in two phases, mainly because we have the sewerage treatment plan that is right in the way of the relocation of the north entrance road and we need to remediate that area before we place a road there. The waste acceptance criteria plan is a plan that we will get into here but as you know the waste acceptance criteria was established in the rods, the OU2, the OU3, the OU5 rod and the waste acceptance criteria plan we all go through and talk about the plan for how we will meet the waste acceptance for the WAC or the soil debris and whatever ancillary remediation waste would be stuff like the personal protective equipment that the worker is required to wear as we go through there so we need to disposition that.

The thought process behind there is this will be the umbrella document that defines how we will characterize this system to characterize that we have actually met the WAC and that the material is ready to go on to the onsite disposal facility. I will also go through and talk about the material contracts and how they will actually track the material from the generation site into the onsite disposal facility.

What I want to touch briefly on is our new ground water monitor and leachate detection program that we have for the onsite disposal facility and a quick background there. The Ohio Administrative Code requires that we have a ground water monitoring program in place. We need that program to be implemented to determine what if any impact we'll have on the ground water and that there needs to be an appropriate number of wells placed so that we can actually detect if there was to be a release effort. We have two types of systems here we will be monitoring in both the Great Miami Aquifer and the Glacial Till. Conventional wells that will be used in the Aquifer system to collect samples and horizontal wells under the sumps for the onsite disposal facility to detect if anything may be there.

I would just like to quickly walk you through,

we have 20 wells located around the facility. I will go through there and each one of these little square boxes and there is 8 of them up there and that is where we intend to have the horizontal wells and our leachate conveyance systems manholes come through there. We are currently establishing the baseline for the first two cells that are out there, actually I should say the first cell. The second cell baseline will start later on this year. We have gone through and come up with 18 analytes that we'll be looking for to monitor both the Aquifer system and the till system. As you know this is going to be a phase in approach as we come down the onsite disposal facility and so we will construct the wells as we move on down. The results from all of the data that we gather will be published quarterly and also will be included in the IMP for the site.

Monitoring in the Glacial till. In addition to the Great Miami Aquifer where we have, we want an early detection system to see if there was anything that may be getting out of the onsite disposal facility. The wells are located in the low point where people call them sumps and it is also the point where the pipes penetrate the lines through there and we need special boots and seaming techniques that are

there so if there is going to be a leak, we believe that will be most likely spot that we can pick them up. The data evaluation process may be a little different than what will actually be or what you have seen of the past. We would like to use a holistic approach with the data here so we can look at the data that is in the horizontal wells and compare it to the data that we have in the wells that we can find in the Aquifer and the GMA. We tend to use some printing analysis to see if there is any correlation to what data, to what if any contaminants we see from the horizontal wells versus the aquifer wells.

I will make a disclaimer here, the next part here may be, let me go through here. I want this -- this is intended to be a discussion of what has gone on and what we have looked at for the category 5 material that's going on so kind of bear with me. This is not a proposal, this is not a done deal, this is information that we want to get out to you. First of all I want to back up and make sure that we are all on the same sheet of music here. Category 5 materials are materials that have been identified in the rod. Category 5 materials have always meant that there is some sort of special handling that was needed. There has been an agreement through the rods that we can put

things like highly compressible material, double bagged asbestos, sludges that will be generated for various waste water treatments processes, typing insulation. Now, what caused all of the fear was oversize material which we had at one point gone through and talked about so let me back up and put some statistics up here for you. The onsite disposal facility, the volume, this volume that we are planning and putting out there is 2.5 million cubic yards. The oversize estimate, the amount that we have gone through, we've always told you it was a small amount, our estimate is anywhere between 10,000 and 20,000 cubic yards. That is less than 1% of the total volume of material that we have been placing in there.

Why did it take us so long to get back to you, you might say? Well, this is a picture of some of the plants and how they existed out there and we tried to do detail walk downs of the plant facility to find out what, if any, are the volumes of materials that we would actually be talking about, trying to put it in a cost effective manner. Out of that list that we came through, we came up with candidates that we thought may have some merits as we walk through and place on the onsite disposal facility and there were vessels and there were gear boxes --

MS. CRAWFORD: What is a vessel or your definition of a vessel?

MR. HICKEY: I've got a picture right here.

MS. CRAWFORD: I think a lot of things when you say vessel, you know, boats --

MR. HICKEY: Okay, so I have all this stuff here. Let's get to the pictures. The vessel has an X on it. It would look something like that. Here is some more vessels (indicating), okay, and we will give you still some more that were out there, even one of these as you go through there.

TRICIA _____: Is there any way to compress those before you put in the, would you be able to make the volume go smaller or do they go in exactly where they existed?

MR. HICKEY: Can we hold that question for a little bit?

TRICIA _____: Yes.

MR. HICKEY: Electric motors, here we go, sitting out there to the side, more electric motors on top, gear boxes in through here (indicating). You can see the material and the kind of conditions it is in, an old decrepit, it has not been used for quite some time, sitting out there. We talked about mill stands and the rollers which I will get to, the housing that

have a support, the mill stands and housing. Here is one of the mill rollers (indicating) that we are talking about, a rather large solid bulk-type piece of machinery that was used, rather sturdy which it needed to be to form the uranium that was processed out there. Here is another picture of a roller that we talked about. We have talked about lathe beds, side pieces out and a bottom here (indicating) that went through. And finally what everyone knows, the white metal boxes were part of the list that we put up there.

At one of the meetings I know that you all asked who is going to do the evaluation on whether these materials could or could not go in. We had Geosyntec do the evaluation. They are the designers of record for the onsite disposal facility. We happened to look through both the status performance which means whether it is going to push down and slide out any of the soil, whether the slopes would fail because of any of these heavy materials that was in there and they looked at the dynamic performance that was there, which means that under the design earthquake what would happen if we placed any of these large materials in there. From that discussion we went down and looked and came to the conclusion that

95% of the oversized material are either going to be size reduced, broken up, to meet the physical waste acceptance criteria that you have already seen or will be shipped off site. That is an economic analysis that is going to have to be done at time the material is generated to go through there but from the analysis that Geosyntec looked at and the economic data that we have and we will go through that. Out of that 10,000 to 20,000 cubic yards, we have broken that down into approximately 500 or 1000 cubic yards that are open for discussion. The items that we wanted to talk about are the big solid pieces. I know there was discussion as to voice phases, irregular geometries, how do you do some of these things that went in and s what we would like to talk to you about are the mill rolls, the big solid pieces of steel that we saw, the mill standings and housings that encompass those and the lathe beds and the category A structural steel.

MS. CRAWFORD: Explain what you mean by the category structural steel.

MR. HICKEY: That is the structural steel.

MS. CRAWFORD: From the building?

MR. HICKEY: From the building. Let me get to the next slide. That 5% also represents the most likely candidate for recycling so what we are trying

to open a discussion here for is the possibility of putting them in. The structural steel, they have looked at it and the recyclers have told us that it may be more advantageous to take it in 20 foot sections rather than 10 foot sections. So the time we go through each demolition we look at the economic condition that prevails and try to recycle that and put it through the recycle methodology that you have seen before to make that determination. The reason we want to talk to you about these is (a) to conserve resources that we have out there from an economic standpoint and (b) there are safety issues trying to break up these larger pieces. We just cannot get a mechanical in there and break them up. You have to put a person in there and actually have to cut them in half.

MR. TABOR: So --

MR. HICKEY: There is always a concern, Bob, when we go in and you have people working with sediment torches, the new gasoline torches that you might have a fire, you might, somebody might get hurt or burned and so what we're trying to do is just side step that issue.

MR. TABOR: Are you going to make a mention regarding Geosyntec's analysis and what they

are saying in regarding the 5%?

MR. HICKEY: Geosyntec, in their analysis, they went through there and that was Tricia's question. They analyze that and from a performance standpoint, long term and short term, during construction, there was not going to be any concern with performance of the cell. These particular items can be placed in there. They are regular shapes, irregular geometries and can be placed in the cell and will not affect adversely the performance of the cell.

MS. DUNN: But you would have to like cut or mash some of these mill stands, what is what those things in that picture, that big roller was in?

MR. HICKEY: You bet.

MS. DUNN: They would have to be like compressed or cut up?

MR. HICKEY: Well, you'd have to cut them up. You cannot compress them. To answer Tricia's statement, some of the things we can crush, so to speak, using standard construction equipment. I think we still have certain amounts of voids in the 95% of the material that was there and therefore we did not feel that we could adequately fill those voids and that is why the decision was to break them up. The size criteria or to send them off site.

MR. TABOR: 95% of the material could either be cut up before it is put in, before it would leave the site, so we are meeting the physical issues which is 5% of bulk, you know, metals that are on site -- I'm sorry, bulk metals, forms that are on site and that is the 5% of the discussion that the question is, what is the right thing to do to potentially enable you to recycle and we know that and the second side of that is that it is, since it is bulk form, what is the real advantage of associated with cutting it up?

It's already a solid mass with no void space and there seems like it would be a trade off with labor associated with trying to cut it up, that 5% versus recycling, versus shipping?

MS. DUNN: There is some hollow space in that one thing back there, right?

MR. TABOR: You would have to take it apart.

MS. DUNN: So you are stating it would go in piece by piece?

MR. HICKEY: This whole thing would go in --

MS. DUNN: And the thing behind it would have to be chopped up?

MR. HICKEY: You would have to take this apart, right.

MS. DUNN: Well, we discussed this last week,

the recycling being checked and again where it went into the cell, that it might be sitting in a stock pile and the price is right and --

(Inaudible)

MR. TABOR: That would be in bulk form. They do not want to mess around with a bunch of pieces.

MS. CRAWFORD: I need you to -- I am confused now, which is not unusual. I guess your percentages have me confused a little bit. 95% of all of the big stuff we have out there, he had just listed off that list would be cut or reduced down or whatever to meet the WAC to go into the waste cell, is that right?

MR. TABOR: Correct.

MR. HICKEY: Or ship off site.

MS. CRAWFORD: Depending on if it meets the WAC -- would you meet the WAC if you go off site? Right?

MR. MANN: Would it be recycle? The contractor could choose to break it up to meet the physical WAC size that you have all seen?

MS. CRAWFORD: But then 5% of this is something like it cannot be cut apart or meet the size or whatever --

MR. HICKEY: Well, that is very difficult to

do, very labor intensive.

MR. TABOR: That 5% is just these things, nothing else than just these things that we are talking about, the mill rolls, the steel, that's the 5% that we're talking about and everything else have to meet the physical WAC that is established -- Bob Tabor over here, how large is that 5%

MR. HICKEY: It represents between 500 and 1000 cubic yards of material Bob, part of the presentation.

MR. JEWITT: I don't know what this is, 5% plus the 95% which is 100% is only 1% --

MR. HICKEY: That was less than the 1% of the hired 2.5 million cubic yards.

MS. CRAWFORD: Would that be one cell?

MS. DUNN: No, this is going to be replaced throughout the entire cell. You can't get it all into one cell?

MR. HICKEY: Geosyntec looked at trying to do that and even if that happened, the performance of that individual cell was not affected.

MR. BONOPART: I would just confirm that you said, Mike, when we looked carefully at the different pieces like the mill roll, that is hard steel, is might be a foot and a half or two foot in diameter? It is solid. Once it's in the cell, nothing is going

to happen to it, no rusting or if it did rust, it actually takes up a little more -- it is stronger than the whole thing and a little heavier. It really had no adverse affect at all so something like that, even if you were to place several of these together, you would not have in effect, not with standing back and part of the overall conservative approach of the time, you would have these placed periodically if you were out there all together.

MR. HICKEY: We won't generate all of this at once.

MS. CRAWFORD: Is there a way you can come back to us in a few weeks or at a later date and this may be asking for way too much, but in order for us to feel comfortable as far as, probably what you are going to have to do is come back to us and say there are ten mill rolls there, are 20 mill stands and housing, there is 10 lathe beds, you know what I am saying? So we have, you know, 1000 to, you know, whatever -- you don't have to tell me in pounds or tons of the steel stuff, but I think what we need generally is a general idea of how many of these things are we talking about because I don't have a clue.

MR. HICKEY: I think that is a very good

suggestion, in fact, we have that inventory, we will give you an inventory of the material and also give you rough dimensions of that and let you know how oversize it is.

UNIDENTIFIED MAN: I can make these pictures up for you.

MS. YOCUM: We want to know what 500 and 1000 cubic yards are?

MS. CRAWFORD: Like, when you say 500 to 1000 cubic yards, we kind of know what you're talking about. I remember that white box where there was a cubic yard, that's been a while though, but I need more, you know, that is broad information. I need a little bit more specific information and then we also at one point talked about if, if you put this in a cell there would be some kind of a foam stuff that would go into it to fill the void?

MR. HICKEY: That is, we are not putting it in unless they are cut up to meet the size.

UNIDENTIFIED MAN: We're going to put pipe in --

MS. CRAWFORD: That would make it a little more, you know, actually lay it out and make it --

MS. DUNN: Why were you going to put white metal boxes in the cell and what was going to be in

them? I mean, why would you put them in there --

MR. BORGMAN: There were some bricks that were placed in these white metal boxes and the bricks had met the waste acceptance criteria for actual placement in there. Why the bricks got in the boxes, I cannot tell you that but they were a unit of bricks that was something like, we were looking at 263, 265 for those boxes that we were looking at to try and do that.

MS. DUNN: Would you just stack them on one of them lathes and instead of putting in the white metal box --

MS. CRAWFORD: Would you empty the boxes and put the bricks in the cell and --

MR. BORGMAN: I think I can add a little bit to this. The material that is in the white metal boxes came out of the furnaces and those furnaces had a coating of asbestos so the asbestos was stuck to the bricks in the powder form so what we did was we did an abatement project to remove those bricks and asbestos in one and put them in the box and doubled wrapped all of that refractory material and put it in the boxes and closed it and it was easier to handle the whole thing.

MR. TABOR: Are you going to ship those off

site, is that what you just said?

MR. HICKEY: No, not the white metal boxes, they are part of the 95% and not going in there and they will either be --

MR. TABOR: I just said are you going to ship them off site and you said no. What are you going to do with the white metal boxes?

MR. BORGMAN: They are looking for a proper way to handle that, not to go through and put the white metal boxes in the cell.

MS. DUNN: But the bricks will still go into the cell?

MR. BORGMAN: Possibly, and that's an option that we are looking at.

UNIDENTIFIED MAN: They will go in the oversized -- in the boxes.

MS. CRAWFORD: So you either take them out of the boxes and bury them in the cell or send the whole entire box and its contents off site?

MR. BORGMAN: That's right.

MS. DUNN: Where would that have to be shipped to, Nevada?

MR. BORGMAN: Either on, Environcare, there's a couple of other sites.

MR. TABOR: I'm saying there couldn't be very

much of that.

MR. BORGMAN: How many boxes did you say? I think there's like 263 or 265.

MR. TABOR: With refractories?

MS. YOCUM: Are the bricks going to be compared to the category 5 and the bricks and the white boxes with the asbestos, are they considered a category 5?

MR. HICKEY: They would be special handling. We have to do that for the brick because of the asbestos content.

MS. YOCUM: Yeah, are those worse than the double bagged asbestos?

MR. HICKEY: No, the same hazard.

UNIDENTIFIED MAN: May I explain something? The bricks are already in the box. The boxes will never be emptied. Because of the size of the box, the box being so high and so wide and so long, that is why it is being considered the category 5 material. The box itself with the brick in it, we never want to take the bricks out so the bricks remain in the box forever and how we disposition it will either be category 5 material --

MR. BORGMAN: So we send them off site.

MS. YOCUM: I think the group better meet on

this project because I hear we are now dumping them and now we're not.

UNIDENTIFIED MAN: No, what you are hearing is the boxes will be filled with the bricks and based on your alls concern, the next meeting we are going to talk amongst ourselves and it is not actual cost effective going off site, but it is a cost trade off. It was worthwhile in dealing with the public on this issue that there was such concern and even though (inaudible) they cannot go in a cell without a white box.

MS. DUNN: Okay, either the white box that contains the brick or the bricks are out of here or repackage the bricks into a smaller container that were to go into the cell and that stays there.

MR. BORGMAN: That would be an option. I believe what you just heard, that is not a viable option.

MS. DUNN: That is the only two options, acceptable options.

(At this time several people were talking at one time and all of it inaudible.)

UNIDENTIFIED MAN: Well, we could do it,

that's the trade off because these materials could go off site and we are processing that to go off site.

MS. DUNN: The guy just said he did not want to take them out and repack them.

MR. TABOR: Well, wait. Let me ask a question here. I hear simple objections to the size of these boxes being one big criteria that to say that you don't have to, want to put in the cell because of the size. Well, if that's the case, how do you account for putting things like that, like that in the cell that's a lot larger?

MR. BORGMAN: You have void spaces in the white metal boxes? Right, now you cannot take all of the refractory bricks and put it in there and not have void spaces so the concern becomes the void spaces, what's going to happen long term with those void spaces?

MR. TABOR: So, the boxes are not full.

MR. BORGMAN: Correct.

MS. DUNN: Do you have data to show, is there data out there that shows if we send these 264, 265 whatever boxes out of here, it will cost this much money versus if we have to repackage and size it down or whatever and keep it here and put it in the cell, do we have some kind of data?

UNIDENTIFIED MAN: Well, not exactly that scenario but the, what it cost to go off site (inaudible) --

MR. STEGNER: Could you speak up please?

UNIDENTIFIED MAN: Basically could have gone to the cell with some adjustments to account the voids. There is a way to fill the voids in boxes.

MS. DUNN: Well, can somebody now do a quickie new analysis that says it will cost this much money to ship and reduce the size and put in the waste cell?

MR. BORGMAN: Sure.

MS. CRAWFORD: I'm just trying to be fair and equitable here. We're trying to look at this issue that we've all struggled with for months and months and months and you are trying to put this big ass thing in there, pardon me, that big thing.

(At this time there was discussion several people and inaudible to the reporter.)

MS. DUNN: To ship this stuff it is not like we don't have stuff flying out of here all the time.

UNIDENTIFIED MAN: It is still additional transportation costs, you know.

MS. DUNN: But, you cannot fit one of those white boxes of bricks on with a couple of sealander --

UNIDENTIFIED MAN: We have many, many boxes. So we do have to get flat beds --

MS. DUNN: But 263 is what percentage shipped out of here.

MS. CRAWFORD: What you want us to say to you is ship it or do the other thing, is that what you all are looking for from us?

MR. HICKEY: No, we're getting into a discussion to find out what your thoughts are on this. I mean, before you were right. You said wait a minute, we don't know how big it is, come back and tell us what big is and this is, we're coming back with this is what we think is a reasonable discussion to have as to why could or could not be, actually go in the onsite disposal facility.

MS. DUNN: Volume was never like the concern, it was the integrity of the performance of the cell, it was not additional volume that was our concern. It was how that it would effect the performance and integrity of the cell long term. That cell is going to be there forever and you have basically answered that for us here, 95% of that stuff has got to be cut up or smashed or it cannot go in there. So, the

volume does not have anything to do with it. You basically said the white metal boxes cannot go in there.

UNIDENTIFIED MAN: No, that's not what we said. The stuff could go in there if the voids are there, but they meet the integrity part of the cell. This stuff could go in the cell because it is such an issue for public, it was something that was evaluated from the cost standpoint and that is possible for most of the stuff to go off site, the very large, large material will be very difficult to ship and very expensive and costly to cut up. Cast iron material is very difficult to cut up and we think it would be a much better idea to put it in the cell and that is basically it. If we cannot redirect it it would be very difficult to (inaudible) and very difficult -- on the site for operation, (inaudible).

UNIDENTIFIED MAN: I think there has to be a methodology and has to be performed if it was going to be recycled by D&D.

UNIDENTIFIED MAN: I'm not sure what you mean by D&D?

MS. DUNN: You are going to get some of this uranium, it would have --

UNIDENTIFIED MAN: (Inaudible). Likely

what I am just saying, any gross contamination would have to be removed from the equipment as all of the other equipment would have to be considered to go to the site. You would follow this pattern of clean out and wash out in this area.

MS. DUNN: I just have one more question and it does not deal with this. Your monitoring plan that you all have to do that, the IEMP is not developing your monitoring plan, is that correct?

UNIDENTIFIED MAN: A monitoring plan has been developed and submitted.

MS. DUNN: But which part of the RV is that because you guys had to develop it, right?

MR. CARR: Well, this ground water development was developed by the same group together we collectively, ourselves, EPA, decided to break out the OFD and this thing was done (inaudible). What the did is they streamlined together and they were developed by the same group and they were broken out separately so the bottom line is the IMP felt that the ground water monitor did not within the existence of the OSDF plan but the OSDF plan is a separate plan that the monitor plan is separate and they will, however, be the date that that comes out of them, will be recorded together under the IMP so you're not

getting two different sources of ground water. We will bring them together and relate them to each other.

MS. DUNN: But the actual plan on how they are going to do this is the one separate document and where do we see this?

MR. CARR: It's in the meeting room now.

MS. DUNN: That's what I'm saying, that separate plan is not going to be fully disclosed with the IMP and acknowledge the data entry granted but the actual plan themselves are of some place else?

UNIDENTIFIED MAN: Pam, that plan went in currently with the IMP and the EPA saw them and reviewed them and approved them on the same schedule and together they can physically stand alone.

MR. CARR: We could get you a copy.

MR. STEGNER: Any other questions?

MS. CRAWFORD: What are we going to do from here in regard to this?

MR. HICKEY: Well, I hear you asking that you would like to have an itemized listing of what the solid pieces are, how many --

MS. CRAWFORD: Picture and size.

MR. HICKEY: Right, and we're trying to focus now on the issues that are on the table and

we're talking about 5% and it's not too much of a discussion here but --

MS. CRAWFORD: We would have all of that information when you have this round table.

UNIDENTIFIED MAN: Pictures, volumes, dimensions, quotes, comparison --

UNIDENTIFIED MAN: Bring a couple of papers and bring another synopsis on the acceptance criteria of the cell as far as the size and --

MR. TABOR: That needs to be put in the perspective in order to understand the magnitude, you know, what bearing it has on it.

MS. CRAWFORD: Can we have, have that workshop that night that you could help explain how you would put this in there? It might be real helpful.

MR. JANKE: We are really out of time, but one thing on the agenda we would like to cover before we leave is the issue of this remedial design fact sheet that we are putting out concerning the plan and the FRL clean up level for contaminant ground water and Kathy Nickels is going to talk about that.

MR. JANKE: In terms of ground water, after this, if you have any specific questions you can answer those questions.

MR. STEGNER: I know some of you have babysitters and stuff but we'll only be about ten more minutes and if you want to stay and ask some questions, Kathy and I will be available.

MS. NICKEL: Okay, I'd like to present to you this fact sheet that we prepared that corrects two ground water FRLs and these are the FRLs for (inaudible). As we are preparing one of the remedial design documents, we realize that these two FRLs were in error. We ought to correct the mistake and we discussed it with both EPAs and we are now preparing this fact sheet (inaudible) that the U.S. EPA has put out with possible changes. And this change is considered to be a nonspecific change and does show all (inaudible) and also recommends the fact sheet is one way that we can document this change. The two FRLs are the fluoride and the lead and if you can recall when we put together the OU5 FRLs the methodology that we have for developing for FRLs is to first look for regulatory standards. A regulatory standard is to develop that. If there is no regulatory standard we simply have a risk phase level or -- in the case of both of these _____ background or looking there was in fact regulatory standards so the change that we are making now is to

correct the regulatory standards and in this case the fluorides of the FRL is changing from .89 milligrams per liter to 4 mg. per liter and the change of lead from .002 mg. to .015 mg. per liter and really, unless there are questions, that is enough said.

(At this time there was a discussion between the people that was inaudible by the court reporter.)

TOM _____: I was just saying that what this really is basically (inaudible).

MS. NICKEL: We will be sending a fax sheet to all of the rod holders and anyone else that requests it.

MR. STEGNER: We will break now if there is any further questions, we will remain for a little while and answer those for you. Thank you very much.